



Unlocking the Key to Undergraduate Research

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Undergraduate Research Opportunities Presentation

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Why Do Undergraduate Research?

Form personal relationship with faculty!

Experience the excitement and frustrations of doing research!

Get exposed to the possibilities of Graduate School!

Learn techniques that can be useful in subsequent research projects!

Interact and network with graduate students!

Increase your ability to do well in Graduate School!



Why Do Undergraduate Research ?

Continued...

Apply classroom theory to practical research situations!

Position yourself for summer research and internship opportunities!

Increase knowledge in your field!

Experience the excitement of innovation and discovery!

Learn to work in teams and collaborate!


Develop oral and written communication skills!



How Do I Get Started?

Investigate

- Should I do research?
- When should I do research?
- Decide what area(s) of research interest you?
- Other ways to participate
- Talk with faculty in your area(s) of interest
- Check out the research group climate
 - Talk to grad and undergrad researchers in the group
 - Ask questions about expectations, possible projects, group structure and routine, etc.



How should I identify a faculty supervisor?

- Narrow down your interest.
- Find out about faculty with interests in your area
- Approach prospective research sponsors
- When you introduce yourself, be specific about your interests, qualifications, and expectations. DO NOT send a general e-mail to a whole list of professors.
- Think about courses you've taken or other educational experiences you've had
- Approach faculty with respect.
- Do your homework: read her or his website and find out about recent publications.
- If possible, interview other students who have worked with the professor.



Applying for a research position

- Meet with faculty members (Be prepared)
- Explain your interest in research (Show enthusiasm!)
- Statement of Interest (should reflect you've done your homework on research subject)
- Prepare resume of academic career, transcript, and other relevant experiences
- Be persistent!



Getting the Best out of your Research Experience

- Build a relationship with your faculty research advisor!
- Build a relationship with the graduate lab involved!
- Be resourceful! Be proactive!
- Break the Learning Curve! Read articles in the particular field
- Present Your Research! Share your knowledge
- Poster Sessions: Local, Regional, National
- Journal Articles, Oral Presentation, Technical Papers, Research Contests



What Opportunities Exist in Undergraduate Research?

- Academic Year Programs
 - URO, URAP, CRA CREW, *Haas*, *UCLEADS* SAGE scholars
- Independent Study
 - 199 for upper division students
- Summer Programs
 - NSF Research Experiences for Undergraduates (REU) Programs, MIT Lincoln Laboratory, Next Generation Internet (NGI), CRA DMP
- Volunteer and Paid Positions
- Poster Sessions: Fall and Spring Semesters
- Berkeley Scientific Journal and other publications



What Resources Are Available To Help Me Get Started?

College Of Engineering

Undergraduate Research Opportunities Page

http://www.coe.berkeley.edu/current_students/uro/

Campus-wide Office of Undergraduate Research

301 Campbell Hall - <http://research.berkeley.edu>

Research@Berkeley electronic mailing list

- Majordomo@listlink.berkeley.edu -Type *subscribe researcher* in body of message; subject line blank

Explore undergraduate research programs. Many universities and research institutions offer special programs to attract emerging scholars and to introduce undergraduates to research in a specific field. These programs typically last for a semester and are often highly competitive. Some programs include stipends for travel and lodging